

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An oscillator circuit, at least comprising:
at least one oscillator device having at least one oscillator bias contact;
a signal shaper device arranged for outputting a limited output signal with a constant amplitude when amplitude of a signal provided by the oscillator device is above a boundary value;

a bias source having a source contact connected to said oscillator bias contact;
said bias source having a first state in which a high level of energy is provided at said source contact, and a second state in which a lower level of energy is provided at said source contact, wherein the high level of energy at said source contact will keep the oscillator device in an oscillating state, whereas the lower level of energy will result in a decreasing amplitude of the signal provided by the oscillator device; and said circuit further including:

at least one switch for switching the bias source from the first state to the second state when a predetermined criterion is satisfied and from the second state back to the first state before the decreasing amplitude of the signal provided by the oscillator device decreases below the boundary value.

2. (Previously Presented) An oscillator circuit as claimed in claim 1 wherein said bias source is a switched DC source which in use provides a bias signal varying between a first level and a second level.

3. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein the lower level of energy is substantially zero.

4. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said signal shaper device comprises at least one limiter device, said limiter device outputting an output signal with an amplitude proportional to said amplitude of the signal provided by the oscillator device when said amplitude of the signal provided by the oscillator device is below said boundary value.

5. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said signal shaper device comprises a band-pass filter device.

6. (Previously Presented) An oscillator circuit as claimed in claim 1, further comprising:

a bias control circuit for switching the bias source on and off depending on a signal outputted by the oscillator device.

7. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said oscillator device at least comprises at least one electrical device with a positive feedback loop.

8. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said oscillator device at least comprises at least one resonator body.

9. (Previously Presented) An oscillator circuit as claimed in claim 1, further comprising a negative resistance device comprising at least one transistor device.

10. (Previously Presented) An oscillator circuit as claimed in claim 4, wherein said limiter device comprises at least one differential amplifier with at least one input

contact connected to at least one oscillator output contact, and at least one output contact connected to a load.

11. (Previously Presented) An oscillator circuit as claimed in claim 10, wherein said load comprises:

at least one resistor connecting at least one of said at least one output contacts to a power supply.

12. (Previously Presented) An oscillator circuit as claimed in -claims 4, wherein said limiter at least comprises at least one transistor device.

13. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said bias source comprises a bias voltage source.

14. (Previously Presented) An oscillator circuit as claimed in claim 1, wherein said bias source comprises a bias current source.

15. (Previously Presented) A wireless electronic device including an oscillator circuit as claimed in claim 1.

16. (Currently Amended) A method for reducing the power consumption of an oscillator circuit,

said oscillator circuit including an oscillator device and a bias source,
said method including:

outputting a limited output signal with a constant amplitude when the amplitude of the signal provided by the oscillator device is above a boundary value;

switching when a predetermined criterion is satisfied said bias source from a first state in which a high level of energy is provided to the oscillator circuit to a second state in which a lower level of energy is provided to the oscillator circuit, wherein the high level of energy at said source contact will keep the oscillator device in an oscillating state, whereas the lower level of energy will result in a decreasing amplitude of the signal provided by the oscillator device ~~the first state to the second state~~; and

switching the bias source from the second state back to the first state before the decreasing amplitude of the signal provided by the oscillator device decreases below the boundary value.